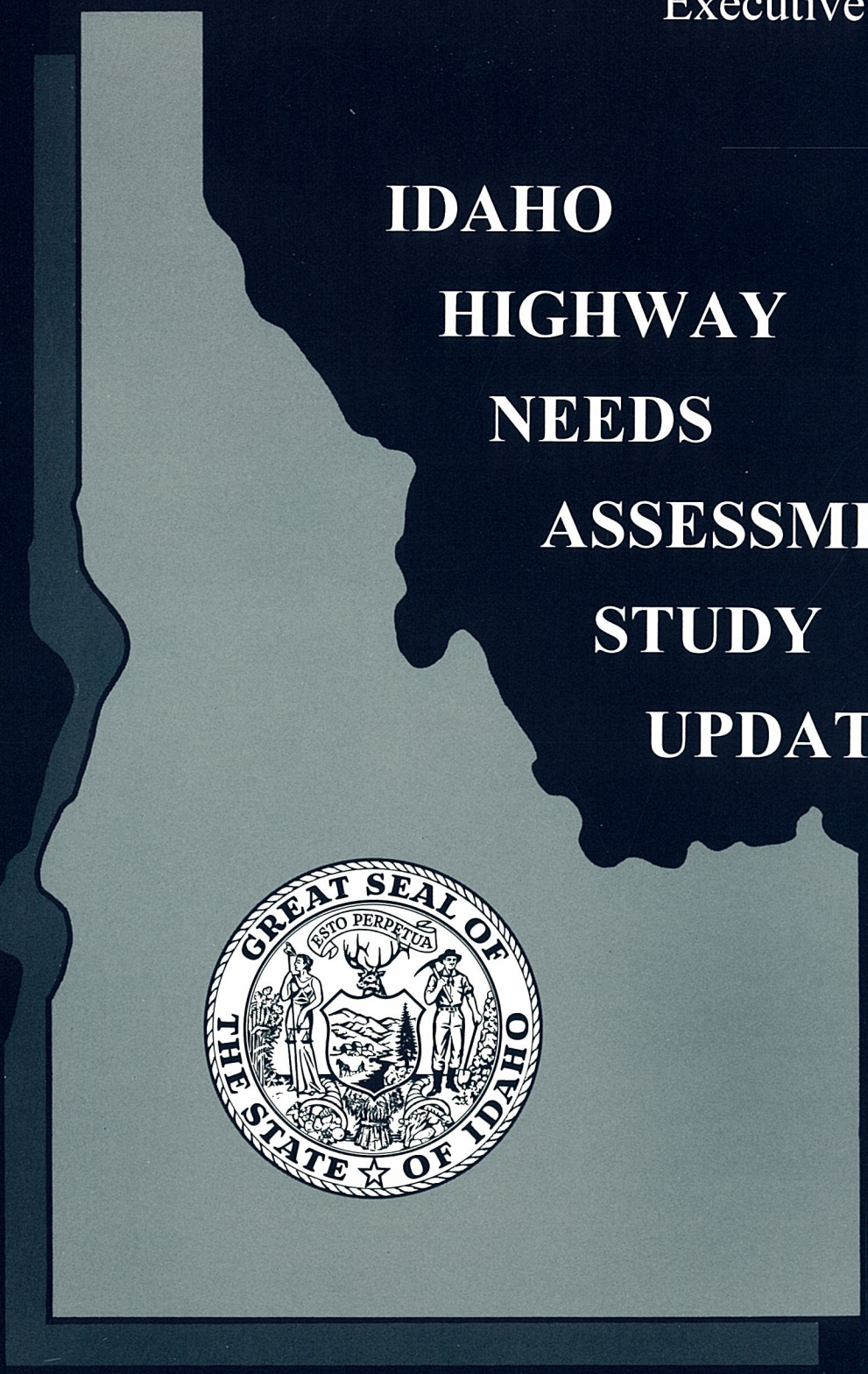
Executive Summary

IDAHO HIGHWAY NEEDS ASSESSMENT STUDY UPDATE



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Local Highway Needs Assessment Council

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EXECUTIVE SUMMARY
Idaho Highway Needs Assessment Study Update

CHAPTER 1 - INTRODUCTION

In 1986, the Idaho Legislature created the Local Highway Needs Assessment Council (LHNAC) with passage of House Bill 501. This eight member advisory body to the Idaho Transportation Board is made up of two members each representing the cities, counties, highway districts and the Idaho Transportation Department.

BACKGROUND

The LHNAC has undertaken two comprehensive needs assessment studies. The Initial Study (completed in 1990) concluded that revenue requirements for the state, county, highway district, and city jurisdictional levels were quite considerable. The February 1990 report determined that:

> *"in large measure, this is in consequence of substantial backlog construction needs which have developed due to past neglect."*

Since the Initial Study by the Local Highway Needs Assessment Council (LHNAC), some changes have occurred regarding highway programs. In particular, in 1991 Idaho enacted a 3 cent per gallon increase in motor fuel taxes in recognition of the substantial problems that existed. Additionally, at the national level, Congress enacted the Intermodal Surface Transportation Efficiency Act (ISTEA) in December 1991. While both of these major actions have been of considerable value in addressing Idaho's transportation needs, it was recognized that they were not sufficient, in and of themselves, to fully address the problems identified in the Initial Study.

Accordingly, this Update Study was undertaken to determine the extent to which conditions have changed and to determine the need for additional measures to address Idaho's substantial highway needs. The Update Study, as summarized herein, clearly shows that the small increase in the fuel tax and the revised federal highway programs were insufficient to fully address the magnitude of the problem. Today, Idaho continues to be faced with a very large backlog of existing highway needs. In addition, needs will continue to develop in response to increased traffic and the aging and deterioration of the highway system. It is appropriate, under these conditions, for Idaho to

again consider substantial measures that will help provide a more effective and efficient highway system.

ECONOMIC IMPACT OF HIGHWAYS

Good highways are of significant value to every Idaho resident and business. In the Initial Study, a comprehensive analysis was undertaken to quantify the contribution which highways make to Idaho's economy. While the Update Study did not include a full scale examination of economic impacts from highways, values from the previous study were adjusted to 1993 price levels. This undoubtedly understates the full economic impacts that would be determined by a comprehensive analysis. Nevertheless, this adjustment helps put the matter into perspective.

These adjustments indicate that highways have economic activity impacts of about $8.0 billion annually. This is comprised of the following components:

- Direct Economic Impacts = $2.5 billion
  - — Created by the provision of highways and vehicles
- Indirect Economic Impacts = $2.7 billion
  - — Created by the use of highways
- Indirect Economic Impacts = $2.9 billion
  - — Created by respending direct and indirect expenditures (i.e., the multiplier effect)
- Total Annual Economic Impact = $8.0 billion
  - — State Highways = $5.2 billion
  - — Local Jurisdiction Highways = $2.8 billion

While these values most likely are understated, they nevertheless demonstrate that the economic value of highways far exceeds the amount of money spent in their provision. The Initial Study found that the provision of highways comprises only 6 percent of the total economic impact of highways. The real impacts derive from highway use.

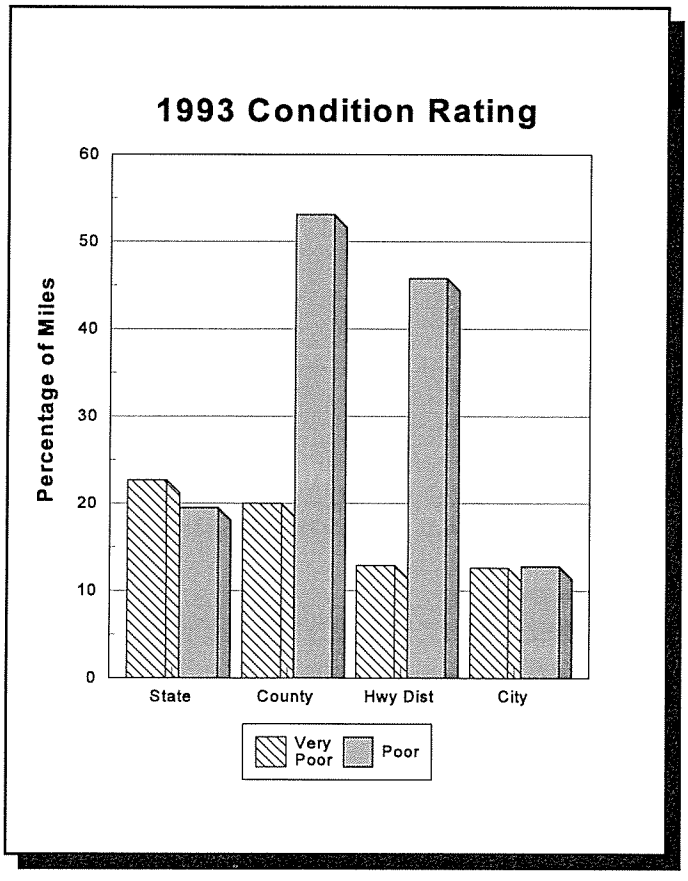
CHAPTER 2 - HIGHWAY NEEDS ASSESSMENT PROCESS

The process employed in the needs assessment conforms to current state-of-the-practice and reflects the many

refinements which have been made in needs analysis procedures over the years. The needs assessment included analyses regarding the current characteristics of the highway system, determination of existing and future deficiencies, and estimation of the cost to correct deficiencies and to maintain and administer the system.

HIGHWAY CONDITION RATINGS

The Highway Performance Monitoring System (HPMS) Analytical Process was used for purposes of highway needs assessments in this Update Study. This model is provided by the Federal Highway Administration for use by the states. It uses standardized highway needs assessment procedures. The model computes a condition rating for roadways. The condition rating is based upon an assessment of the surface condition of the pavement, as well as an assessment of the adequacy of the surface type, in relationship to the functional class and travel volume on a facility. These analyses revealed varying characteristics by jurisdictional level and several important areas of concern.



- On the State system, 42 percent of all highways were rated as either "very poor" or "poor" condition.
- For the Counties, 73 percent of all highways had "very poor" or "poor" condition.
- Highway Districts had 59 percent of all highways in the "very poor" or "poor" category.
- Cities had the least proportion of mileage in these categories with 25 percent of the mileage being either "very poor" or "poor."

On a functional classification basis, there are reasons to be concerned about the large proportion of roadways which are rated "very poor" or "poor." For instance:

- 39 percent of all Interstate highways are rated as already being in the "very poor" or "poor" condition.
- Additionally, 38 percent of all Arterials in the state are in "very poor" or "poor" condition.
- Almost 50 percent of all the Collectors in the state are in "very poor" or "poor" condition.

CHAPTER 3 - IDAHO'S HIGHWAY NEEDS

NEEDS ASSESSMENT CRITERIA

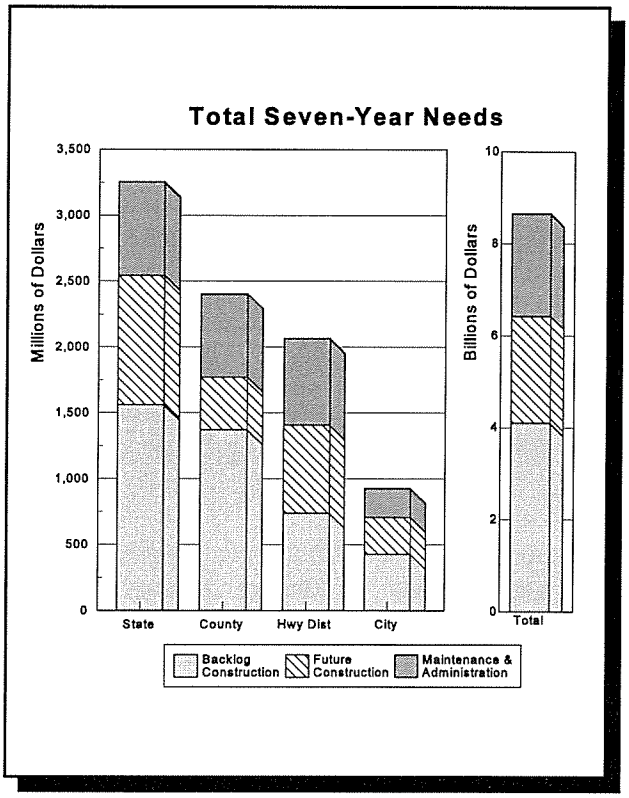
Highway system needs are a reflection of the existing and future characteristics of the highway system as well as deficiency criteria and improvements standards employed in the needs assessment. For this Update Study, it was determined that a very conservative approach should be taken because it was evident, from the Initial Study, that there are insufficient resources to eliminate all system deficiencies. This study's tolerable conditions and improvement design standards, which actually control the needs results to a large extent, are much lower than existing officially adopted standards.

As a consequence, the criteria adopted for this study's analyses mean that many unpaved roads will remain unpaved; many narrow highways will not be widened, many miles with poor alignment will not be straightened; some deficient bridges will not be replaced; and traffic congestion will continue to exist, and grow, on some highways.

TOTAL SEVEN-YEAR NEEDS, INCLUDING BACKLOG

Total needs for the period 1994-2000 include highway construction needs, bridges, railroad grade crossings, maintenance and administration.

- For all four jurisdictional levels, total needs amount to $8.655 billion for the seven year period.
  - — Of this amount, $4.100 billion (47 percent) is to rectify current deficiencies which resulted from past funding inadequacies. These are called "backlog" needs.



- The State system accounts for $3.253 billion.
  - — 48 percent of this total is for backlog needs.
- Needs on the County system amount to $2.408 billion.
  - — 57 percent of this total is for backlog needs.
- Needs amounting to $2.088 billion occur on highways for which Highway Districts are responsible.
  - — 36 percent of this total is for backlog needs.
- Needs on City streets total $0.906 billion.
  - — 46 percent of this total is for backlog needs.

CHAPTER 4 - HIGHWAY FINANCE

Idaho is similar to other states regarding the sources of funding for highways. Both highway user and non-user (general public) sources are used in recognition that both groups benefit from highways and place demands upon highway system expenditures.

HIGHWAY USER REVENUES

There are two principal sources of highway user revenues, viz., federal- aid and state user taxes which accrue to the Highway Distribution Account (HDA). The Study's revenue forecasts do not reflect any increase in tax rates or any change in the tax structure.

Federal Highway Trust Fund

Federal-aid for highways derives from the U.S. Highway Trust Fund which receives revenues from federal user taxes including part of the 18.4-cents per gallon tax imposed on gasoline. The majority of these funds are apportioned to the states on the basis of various distribution formulas. Over the 1994-2000 study period, Idaho is expected to receive $0.694

billion of federal highway funds, accounting for 26 percent of the total funds for all highways in Idaho. Of this amount, $0.117 billion or 17 percent of the federal funds will be made available for use by local governments.

State Highway Distribution Account

The State also imposes taxes on highway users, with net funds being deposited in the Highway Distribution Account. The major state user taxes are the fuel taxes, vehicle registration fees, and gross weight-distance tax. HDA funds are distributed to Law Enforcement (5.40 percent), the State Highway Account (58.83) and local governments (35.77 percent). The amount of HDA funds going to highway programs from 1994-2000 is estimated to total $1.496 billion, thus providing 55 percent of all highway funds.

NON-USER REVENUES

The third major source of funding for highways are property taxes which are generated by local governments. Also, local governments receive distributions of State sales tax revenues and a small portion of these funds are applied to highways. Some Counties and Highway Districts receive National Forest Reserve Apportionments which provide a source of highway funding. Some Counties also receive federal payment-in-lieu of taxes (PILT) which provide a source of highway funding. Non-user funds are estimated to total $0.531 billion in the 1994-2000 period and to account for almost 20 percent of all highway funds.

FUNDING BY JURISDICTIONAL LEVEL

Seven-year highway funds for the four jurisdictional levels are estimated in the accompanying table.

HIGHWAY USER & NON-USER FUNDING
1994-2000

JURIS-DICTION	HIGHWAY USER REVENUES		NON-USER REVENUES	TOTAL	PERCENT OF TOTAL
	Federal	State			
State	577.0	930.1	0.0	1,507.1	55.4
County	29.0	197.9	147.2	374.3	13.8
Highway District*	54.1	243.2	292.2	589.5	21.7
City	33.6	124.4	92.0	250.0	9.2
TOTAL	693.8	1,495.6	531.4	2,720.9	100.0
% of Total	25.5	55.0	19.5	--	--

* Accounts for pass through of HDA funds from cities to the Ada County and Sandpoint Highway Districts.

NOTE: Details may not add to totals due to rounding.

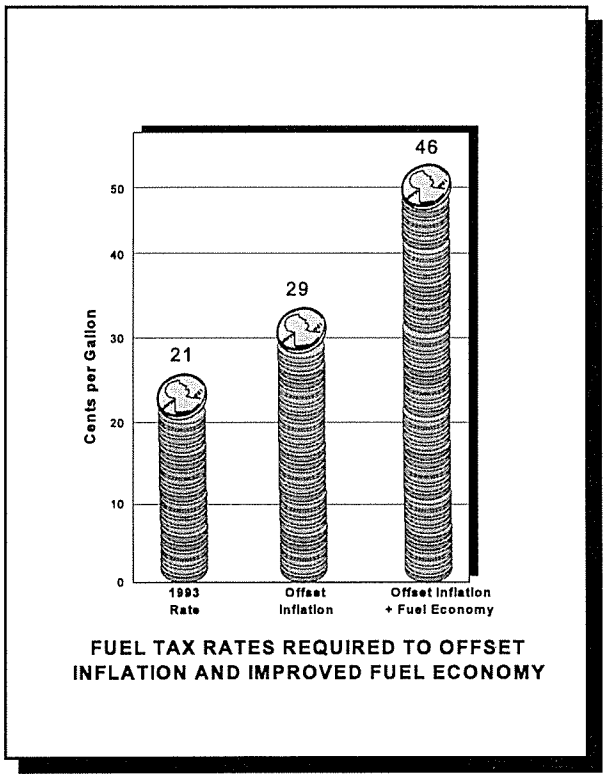
EFFECTS OF INFLATION AND FUEL EFFICIENCY

Historically, Idaho has periodically adjusted the state fuel tax upwards, usually by small increments. Since 1972, there have been six increases which averaged just over 0.5 cent per gallon per year.

Despite the increase to 21 cents per gallon, the current inflation adjusted rate has less purchasing power than the 8.5 cents per gallon instituted in 1972. A tax rate of 29 cents per gallon would have been required in 1993 in order for the fuel tax rate to keep pace with inflation.

In addition, the fuel efficiency of vehicles has increased dramatically. While this has helped further the goal of fuel conservation, it means that less fuel taxes are paid per mile of travel because less fuel is consumed.

The combined effect of inflation and increased fuel efficiency is that a rate of 46 cents per gallon would have been required just to be comparable to the 8.5 cents per gallon in 1972.



FUEL TAX RATES REQUIRED TO OFFSET INFLATION AND IMPROVED FUEL ECONOMY

CHAPTER 5 - FUNDING SHORTFALLS

These analyses have again documented the magnitude of the highway finance dilemma that was first documented in the Initial Study. The Initial LHNAC study concluded that:

> *"The reason there is a large backlog of highway needs is because highway funding has been inadequate in the past. Therefore, it is not surprising that, in the absence of major changes in highway funding, revenues forecast to be available fall well short of highway needs."*

As noted above, conditions have not changed materially, despite the fact that the fuel tax was increased following the Initial Study. Indeed, the Initial Study showed that Draconian measures were required to meet the most urgent highway needs. While the three cent per gallon increase in 1991 has helped address highway needs, the results of the Initial LHNAC study clearly showed that much greater steps were required if the backlog of needs was to be diminished significantly. As shown herein, conditions have not altered greatly as a result.

STATE HIGHWAY FUNDING SHORTFALL

As noted, state highway funding for the seven-year period is forecast by the Idaho Transportation Department to total approximately $1.507 billion. With needs of $3.253 billion on the State system, revenues will fall short by $1.746 billion. That is, anticipated revenues will cover only 46 percent of the total needs.

COUNTY HIGHWAY SHORTFALL

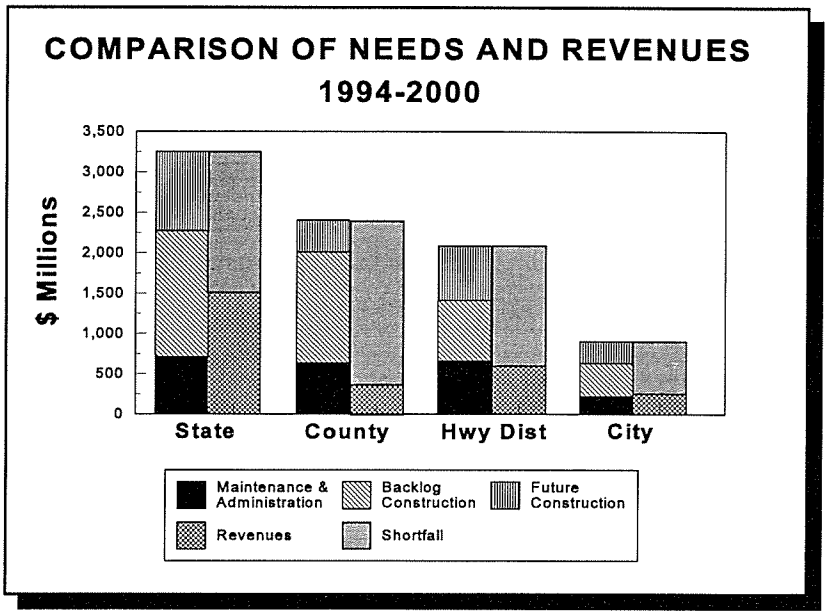
Revenues for County highways are forecast to be $0.374 billion, whereas needs have been determined to be $2.408 billion. This creates a revenue shortfall of $2.034 billion. Anticipated revenues will cover only 16 percent of total needs.

HIGHWAY DISTRICT SHORTFALL

Highway Districts are forecast to have revenues totaling approximately $0.589 billion during the seven year period. Needs on facilities for which Highway Districts have responsibility total $2.088 billion, producing a shortfall of $1.499 billion. Anticipated revenues will cover only 28 percent of total needs.

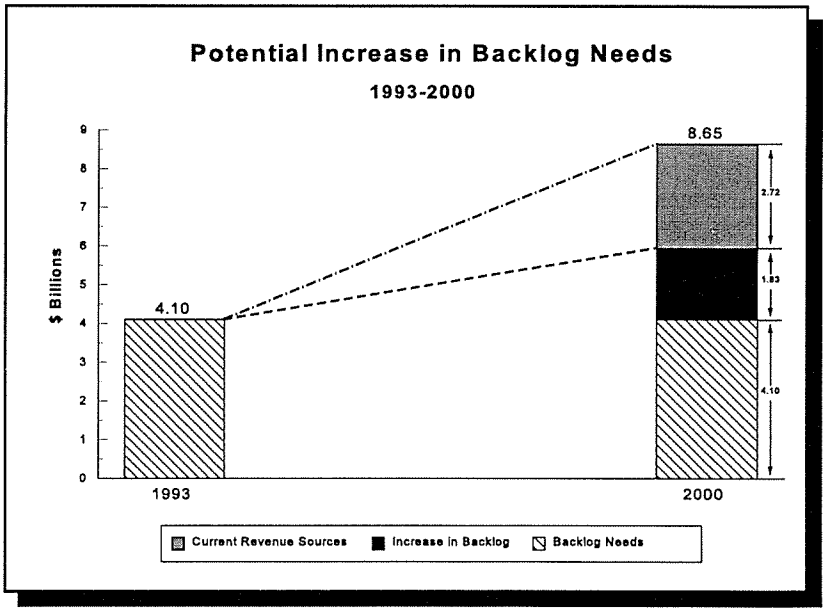
CITY STREET SHORTFALL

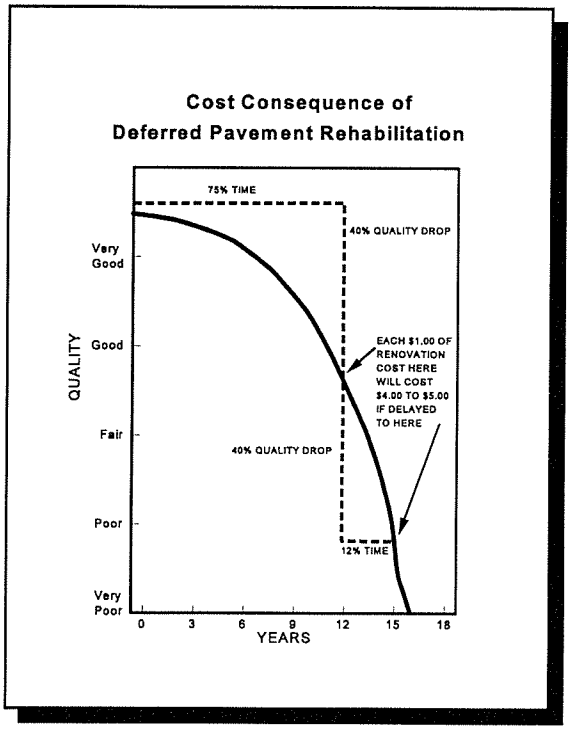
Revenue forecasts for Cities total $0.250 billion during the seven year study period. On the other hand, needs amount to $0.906 billion during that period. Revenues will cover only 28 percent of these needs, leaving a shortfall of $0.656 billion.



IMPACTS FROM REVENUE SHORTFALLS

Under the forecast conditions, the backlog of highway needs must inevitably grow. In 1993 backlog needs amounted to $4.100 billion. With only $2.721 billion in revenues from existing sources to address $8.655 billion in needs for the period 1994-2000, the backlog could grow to $5.934 billion in 2000. This is an increase of $1.834 billion, or 45 percent.



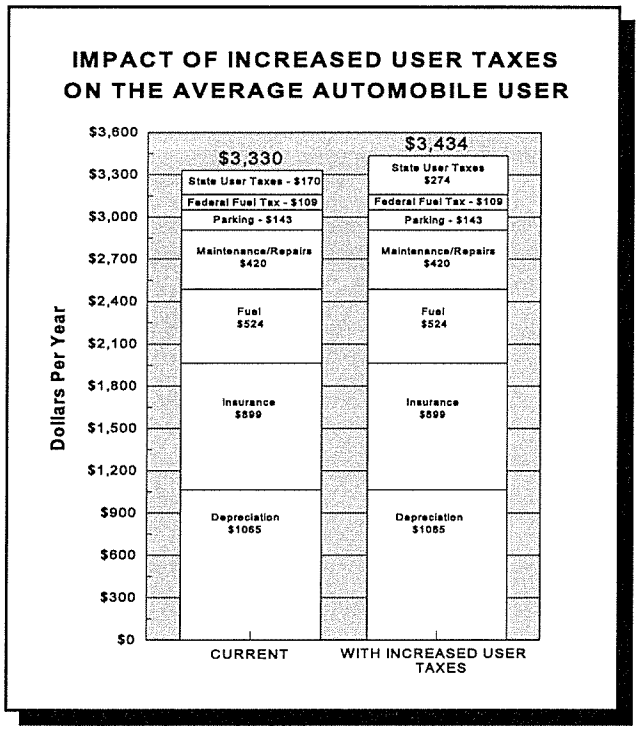


Dual Approach to Keep Backlog from Growing

The revenue shortfall is of such magnitude that it cannot be solved painlessly. Nevertheless, the longer the problem is allowed to continue, the more painful the solution will become. The time to act is now.

Increasing revenues is one of the means available to keep backlog needs from growing by $1.834 billion. Based upon cost responsibility analyses (discussed in the next section), increases in both user and non-user revenue services are required.

If it is assumed that additional state user taxes are to provide one-half of the $1.834 billion required to contain the backlog, this will increase the typical motorist's annual payments from $170 at present to $274. This means that the total cost to own and operate a typical automobile will increase by only three percent, from $3,330 to $3,434. While the increase in state user taxes is substantial if viewed by itself, its overall impact is small because state user taxes are a small component (five percent) of total costs.



Since it is not practical to rely totally upon increased user and non-user revenues, it is necessary that needs be prioritized. There are differences in the urgency and warrants for certain categories of needs. If certain critical needs are not addressed on a timely basis, this can increase the ultimate costs by four to five times. These needs must be given high priority.

For other less critical needs, it will be necessary to adopt a lower standard of services. For instance, it will be necessary that some roads remain unpaved; maintenance levels on less important roads will have to be reduced; and safety standards on some roads will have to be compromised.

CHAPTER 6 - COST RESPONSIBILITIES AND REVENUE DISTRIBUTIONS

COST RESPONSIBILITIES

As noted, revenues for roads and streets derive from both highway user and non-user sources. This division of responsibilities is a fundamental principle in highway finance in Idaho and across the nation. This principle recognizes that non-users of the highway system benefit because highways provide public access to property and contribute to the total economy. Highway users benefit from the transportation function of highways. The distribution of user and non-user benefits differs significantly for the different types of facilities. Interstate highways and other arterial routes provide important mobility functions while non-user benefits are of secondary importance for these facilities. On the other hand, local access roads carry relatively light traffic and principally serve abutting properties. Because of light traffic volumes, these roads generate very little highway user revenues.

Highway User Cost Responsibilities

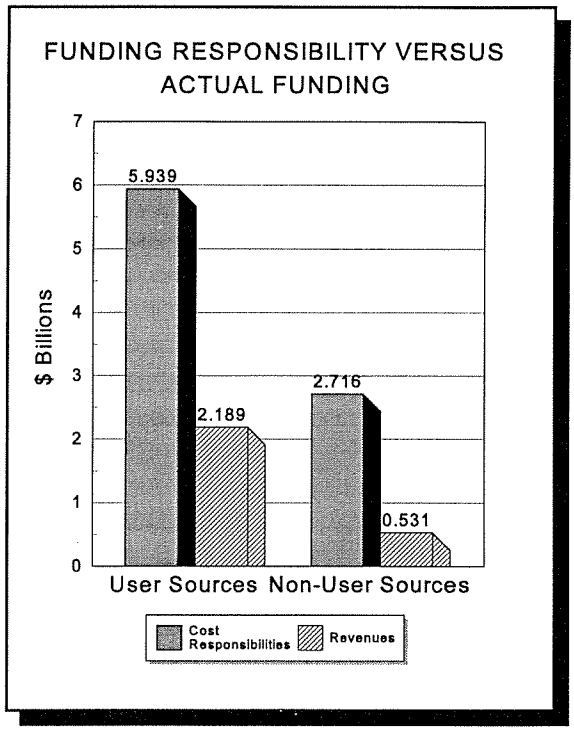
Assignments of cost responsibilities recognize that the main function of arterial highways is to serve major traffic flows,

with access to properties being a subordinate function for these facilities. Accordingly, road users should be responsible for at least a major share of the costs for arterials, plus equitable shares of the costs for collector and land access facilities which have less prominent travel functions.

Based on the Study's analysis, the highway user cost responsibility amounts to $5.939 billion of the $8.655 billion in needs, or 69 percent. The forecasted $2.189 billion in highway user revenues from existing sources falls short by $3.750 billion, i.e., only 37 percent of the highway user responsibility will be funded in the absence of increases in highway user revenues.

Non-User Cost Responsibilities

Cost responsibility determinations recognize that land access roads and streets play a minor role in serving traffic flows. Instead, these facilities primarily provide a means of access to farms, houses, etc. Highway user tax earnings from travel on land access roads are very small and cover only a minor portion of the costs of such roads and streets. The major responsibility for such facilities equitably is assignable to non-user revenue sources such as property taxes or general sales taxes.



Study analyses determined that the equitable non-user cost responsibility is $2.716 billion, or 31 percent of total needs. However, study forecasts indicate a very substantial shortfall in non-user revenues. The $0.531 billion in non-user revenues will cover only 20 percent of the non-user cost responsibility.

DISTRIBUTION OF HIGHWAY USER REVENUES

Using results of the user/non-user cost responsibility analyses, equitable distributions of user revenues were determined. These determinations recognized (1) user cost responsibilities for the state and local government highway systems, (2) the current 5.4 percent statutory HDA allocation to Law Enforcement, and (3) the manner in which Federal-aid revenues (derived from highway users) currently are shared. Comparisons of these analytical results with the current allocations from the HDA are as follows:

	STATUTORY ALLOCATION	
Law Enforcement	5.40%	
	ALLOCATIONS BASED ON:	
	Current Formula	User Cost Responsibilities
State Highway Account	58.83%	57.7%
Local Jurisdictions	35.77%	36.9%

The current allocation formula for the state and local shares conforms closely to allocations based upon user cost responsibilities.

CHAPTER 7 - CONCLUSIONS AND RECOMMENDATIONS

Based upon the analyses reported herein, certain conclusions about highway programs and their funding have evolved (see pages 14 and 15). These conclusions, in turn, have resulted in a number of Update Study recommendations which are presented on page 16.

SUMMARY OF CONCLUSIONS

1. There has been a pattern of chronic underfunding of highway programs
2. Revenue shortfalls have forced postponement of critical highway and bridge projects which has created a sizeable backlog of needs.
3. When certain critical projects are deferred for only a short time, this typically increases their costs by 4 to 5 times.
4. In addition to backlog needs, future projects also must be addressed by the four jurisdictional levels.
5. Users should be responsible for 69 percent of all needs. Non-users should be responsible for 31 percent.
6. In the absence of changes in funding programs, highway user revenues will provide 80 percent of all funding.
7. Only 20 percent of all highway program funding will come from non-user sources.
8. Revenues from current sources will cover only 31 percent of total needs.
9. The backlog of highway needs could grow from $4.100 billion to $5.934 billion by 2000.
10. An increase of 67 percent in revenues is required to keep backlog needs from growing.
11. The problems identified by this study have not occurred overnight and they cannot be fixed overnight.
12. As a minimum, Idaho should adopt a goal of not allowing backlog needs to grow.
13. To keep backlog needs from growing, increases in both highway user and non-user revenues plus reductions in service standards are essential.

SUMMARY OF CONCLUSIONS
(continued)

14. Increases in highway user revenues are required now and on a continuing basis.

15. Increases in non-user revenues are required and warranted.

16. In some cases, maintenance levels must, of necessity, be limited to essential activities only.

17. Improvement programs must focus upon projects which minimize life-cycle costs.

18. Available revenues would best be focused upon the needs of the most important roads.

19. The current state and local government shares of the Highway Distribution Account conform closely to shares based upon cost responsibilities.

20. There are justifications for funding Law Enforcement by means other than the Highway Distribution Account.

21. A significant amount of state highway user revenues are not being used for highway improvements and maintenance.

22. Some Federal-aid funds are not being used for highway improvements and maintenance.

23. Idaho's highways currently contribute $8.0 billion annually in economic activity impacts.

24. Update Study findings reaffirm Initial Study findings.

25. To assess the effectiveness of measures designed to forestall growth in backlog needs, periodic highway needs studies will be required.

26. Given the magnitude of the actions required to keep backlog needs from growing, it is important that all those who would be impacted be informed about the necessity for such measures.

RECOMMENDATIONS

1. A goal of no increase in backlog needs should be adopted.

2. Highway user revenues should be increased by $0.917 billion, or one-half of the amount required to avoid growth in backlog needs. A long-term program of scheduled increases in highway user fees and taxes should be adopted.

3. The additional $0.917 billion required to keep the backlog at 1993 levels should come from both increased non-user revenues and decreased service standards.

4. Local governments should be exempted from caps on property tax, including authorization to utilize fully the current statutory limits for highway funding.

5. Local governments should be enabled to raise non-user revenues from development impact fees and other means.

6. On the least important roads, maintenance should be limited to only absolutely essential activities, despite the adverse impacts this will have.

7. Highway agencies should focus scarce resources upon projects which minimize life-cycle costs.

8. Highway user revenues should be focused upon those roads of greatest importance to highway users, viz., arterials and collectors.

9. The Highway Distribution Account should be used to fund highway maintenance and improvements. The needs of all other non-highway agencies should be funded by other means.

10. Federal-aid revenues should be used for highway and bridge construction and maintenance to the maximum possible extent allowed by law and considering community needs.

11. The needs assessment study should be updated in five years to gauge the effectiveness of program changes and to maintain awareness of the problems created by past underfunding.

12. Study findings should be presented to the public in connection with hearings held by the Legislative Council Interim Committee on Highways. Because of the vital importance of an adequately financed highway program, other means also should be used to widely publicize study findings.

For Further Information

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